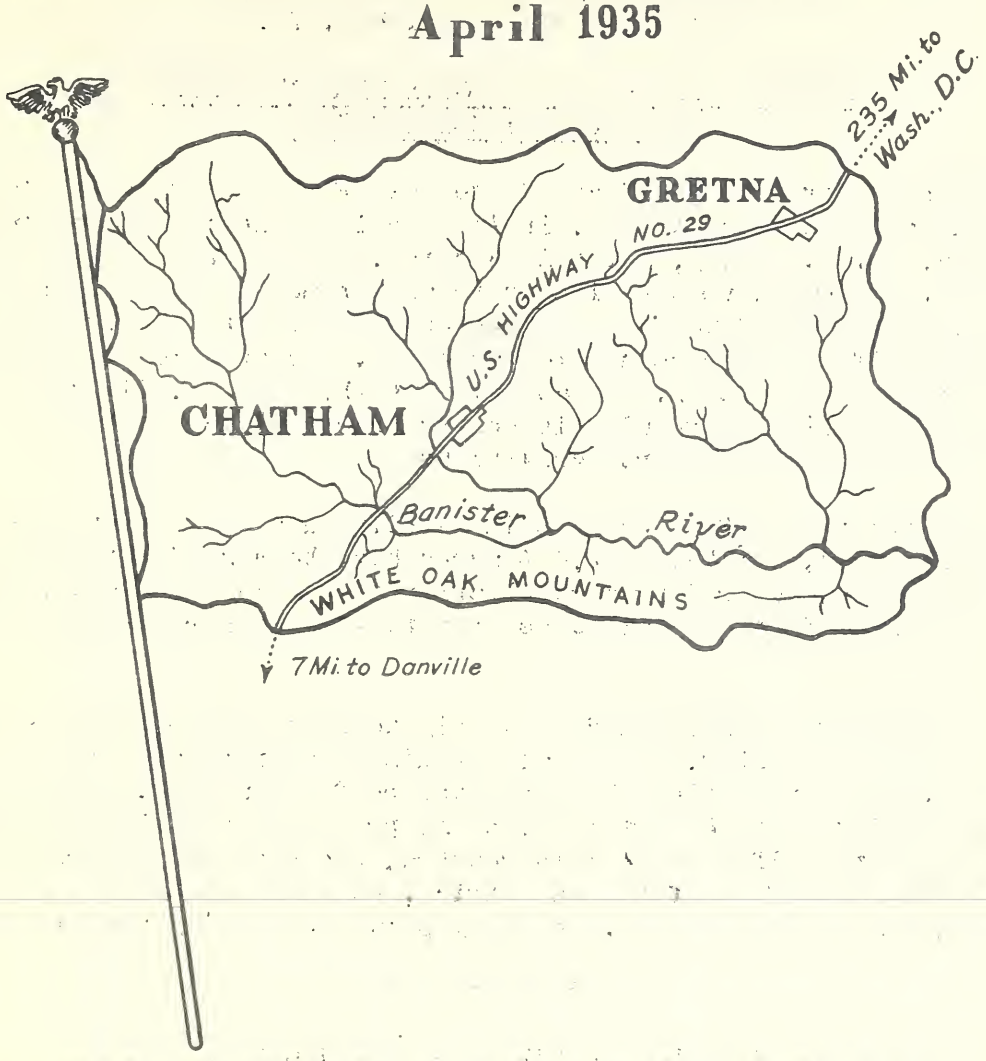
April 1935



Banister River Banner

SOIL EROSION SERVICE
U S
DEPARTMENT OF THE INTERIOR

VOLUME 1 NUMBER 9

CHATHAM, VIRGINIA

S O I L E R O S I O N S E R V I C E
United States Department of Agriculture
Project No. 22 - Chatham, Va.

AGRONOMY DEPARTMENT OF SOIL EROSION SERVICE IN MIDST OF SEEDING WORK

The Banister River Project of the Soil Erosion Service is depending largely on hay crops and pasture, in its erosion control program on farms of the area. T. L. Copley, Chief Agronomist, reports that 260,000 pounds, or 130 tons, of seed have been issued to approximately 600 cooperating farmers who have agreed to follow the plan suggested for their farms. Approximately half of these seed were Lespedeza, a crop which has become very popular during recent years. In addition to this seed 6,264 tons of lime and 490 tons of fertilizer were also issued to promote quick growth and insure good results even under adverse conditions.

In spite of the fact that spring seeding has been delayed by frequent rains and wet land, a total of 3,674 acres have been seeded to date. These acres include land retired from cultivation for permanent pasture or meadow and also the seeding of hay mixtures to establish crop rotations or strip cropping.

The seeding of these lands not only help to control erosion on fields subject to severe washing, but it also tends to help balance the farming system and furnish sufficient hay and pasture for home use. The Soil Erosion Service is making every effort to plan the proper land utilization for every field on the farm. If this goal is reached, cooperating farmers in the area should, at the end of the five year period, have a decidedly better farm than at the beginning of the period, and they should be making a better living.

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RAINFALL IN BANISTER RIVER AREA DURING MARCH 1935

1. Chatham Experiment Station - - - - - - - - - - - - - - 6.36 inches.
2. Climax (Walker's Store) - - - - - - - - - - - - - - - 4.32 inches.
3. Dry Fork (J. W. Bryant's Store) - - - - - - - - - - 5.61 inches.
4. Jones' Mill - 6.20 inches.

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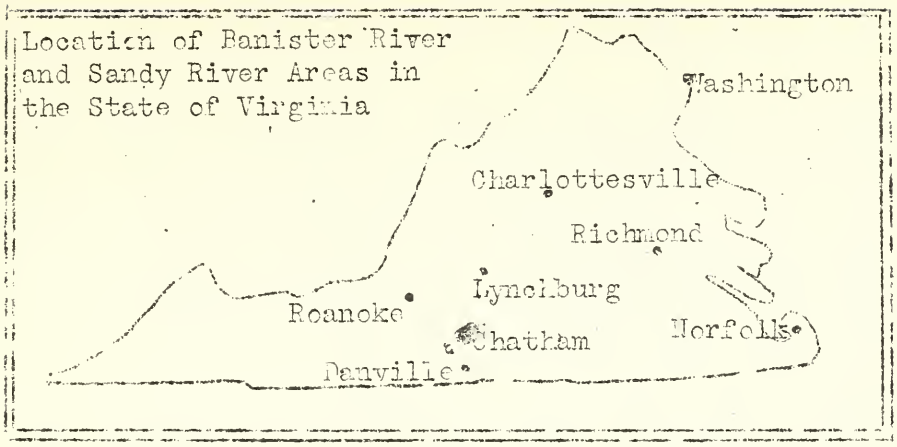
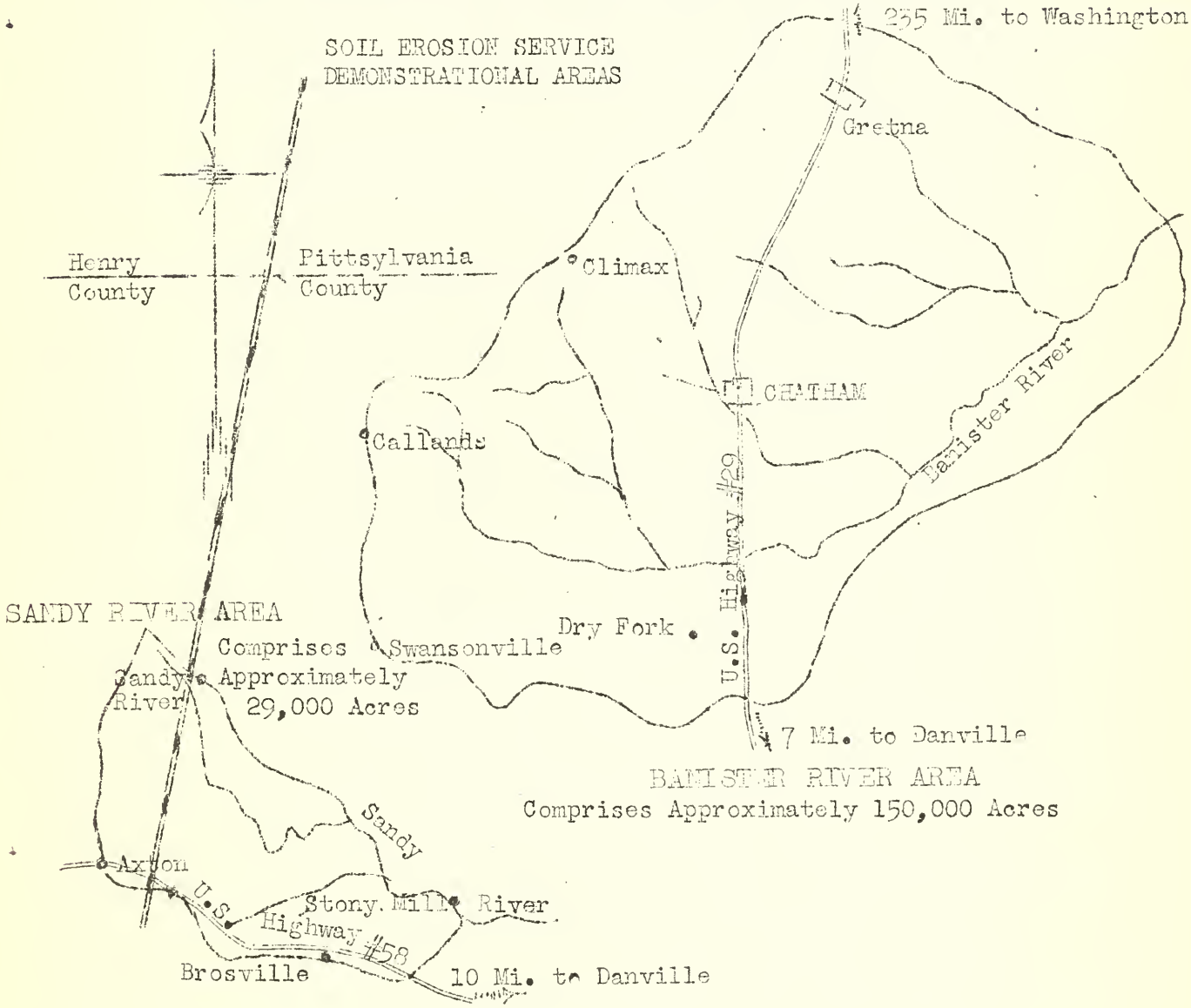
SANDY RIVER WATERSHED AREA

Twenty Nine Thousand acres of the Sandy River Watershed Area were approved March 7, 1935 and work was begun March 28th. In two days time 30 temporary agreements, covering 300 acres, were signed. Of these 92 acres are to be seeded in permanent sod; 116 acres strip cropped; 215 acres terraced, and 3½ acres reforested. The seed, lime and fertilizer have already been allotted for these farms and the terracing work will start as soon as the weather will permit.

The spirit of cooperation shown by most of the farmers contacted in the area is very gratifying to the Soil Erosion Service. Some of the farmers have indicated a willingness to furnish their own power and labor in order to get the terraces constructed on their farms as soon as possible. Others are furnishing equal amounts of seed as allotted by the Government so as to get their farms seeded to crops which will control soil erosion.





The Sandy River Area was approved in January 1935 by Secretary of the Interior Harold L. Ickes. This new area expansion is located partly in the southwestern part of Pittsylvania County and in the eastern part of Henry County. Soil Erosion control work will be started sometime during the month of April.

THE COOPERATOR AND THE SOIL EROSION SERVICE

The farmers agreeing to cooperate with the Soil Erosion Service were asked to give the erosion control program 100% cooperation. The Soil Erosion Service is well pleased with the cooperation it has received from the majority of the farmers. Lime has been spread, seeding done and other erosion control work has been performed at a rapid pace. Most farmers have been able to do their seeding before the regular farm work. If planned, your erosion control program can be carried out satisfactorily with your regular farming operations and will become a part of it.

WHAT A GOOD COOPERATOR DOES:

1. Know his part of the Soil Erosion program.
2. Protect Forest from fire and grazing and clear cutting.
3. Keep terrace banks protected and channels opened.
4. Follow rotation planned for his farm.
5. Keep cover-crop on land when not in cultivation.
6. Secure helpful suggestions from fellow cooperator.
7. Make helpful suggestions as they may arise.
8. Ignore outside criticism meant to discourage program.
9. Report true farm conditions from time to time, giving advantages and disadvantages of program.
10. Feel free to call on Soil Erosion Service to discuss Soil Erosion problems.

FORESTRY

The Forestry department has planted 560,284 trees to date and practically completed the forest plantings for this spring. These trees have been divided as follows:

On the Banister River Area 558,284 trees;
On the Sandy River Area 2,000 trees.

We have not been able to complete the forest plantings of a few of our cooperators due to a lack of suitable planting stock. We confidently expect to have this stock next fall.

During the past month 43 acres of demonstration thinnings have been made in dense natural stands of timber along the principal highways in this project. This work has been done by men from the CCC Camp under supervision of the forestry division. The forestry division will be glad to mark the woodlots of cooperators for thinning or final cutting. Marking can be completed during the summer and actual cutting be accomplished by the owner during the winter months.

This is an excellent way to secure flue wood, fire wood, posts and other material needed every year on the farm. This method of selective cutting makes use of dead, and dying trees, undesirable specimens and is a real method of preventing erosion in woodland areas. Finally it leaves the remaining trees a better chance to make increased growth and profit for the owner.

ENGINEERING

To date the Engineering Department of the Soil Erosion Service has constructed 258 miles of terraces on 123 farms; benefiting 2,473 acres of cultivated land. To convey the water from terraces to some natural waterway it has been necessary to construct 20 miles of diversion and terrace outlet channel. Terrace outlet channels are usually constructed on the natural slope of the land and in most cases the slope is such that the channel bottom must be protected from gullying, due to the excessive slope and concentration of a large volume of water. 2,506 structures have been completed to step the grade of the channel down to a safe slope for vegetative control. Sod strips and spreader boards are used in between structures to keep the water spread at a minimum depth over the entire channel. Complete seeding of the entire channel is now underway and will be completed during the spring seeding season. To date a total of 64,193 sq. yds. of terrace outlet channel have been seeded and sodded.

Exclusive of terrace outlet channel control, a total of 4,821 check dams have been constructed to control gullies, benefiting 3,370 acres.

SOILS DEPARTMENT

"Soils of the Banister River Watershed"

The Soils Department up to the present time have made a soil and erosion survey of approximately 864 farms, or 65% of the farms in this area.

Below is given a description and discussion of the Meadow Soil found in this area. This a continuation of soil articles started by the Soils Department several months ago.

Meadow

Meadow soils are subject to overflow from streams. Often it develops as sandbars and sandy areas over bottom land. In some instances meadow represents more or less poorly drained or wet land along stream bottoms. The surface soil as well as the subsoil is quite variable in color and texture due to varying amounts of organic matter, drainage and kind of soil deposited by the stream.

DEGREE OF EROSIVENESS - This soil is constantly being "shifted" by the stream overflow. When swift overflow occurs, some soil may be removed and at other times soil may be brought down from the other farmers' fields and deposited over the Meadow by overflow.

FERTILITY - Becuase of its variability in physical and chemical condition the Meadow is quite variable in fertility.

CROP ADAPTABILITY - Pasture is generally recommended. On the better phases, corn will do very well. Where stream overflows are not frequent, hay may be grown successfully.

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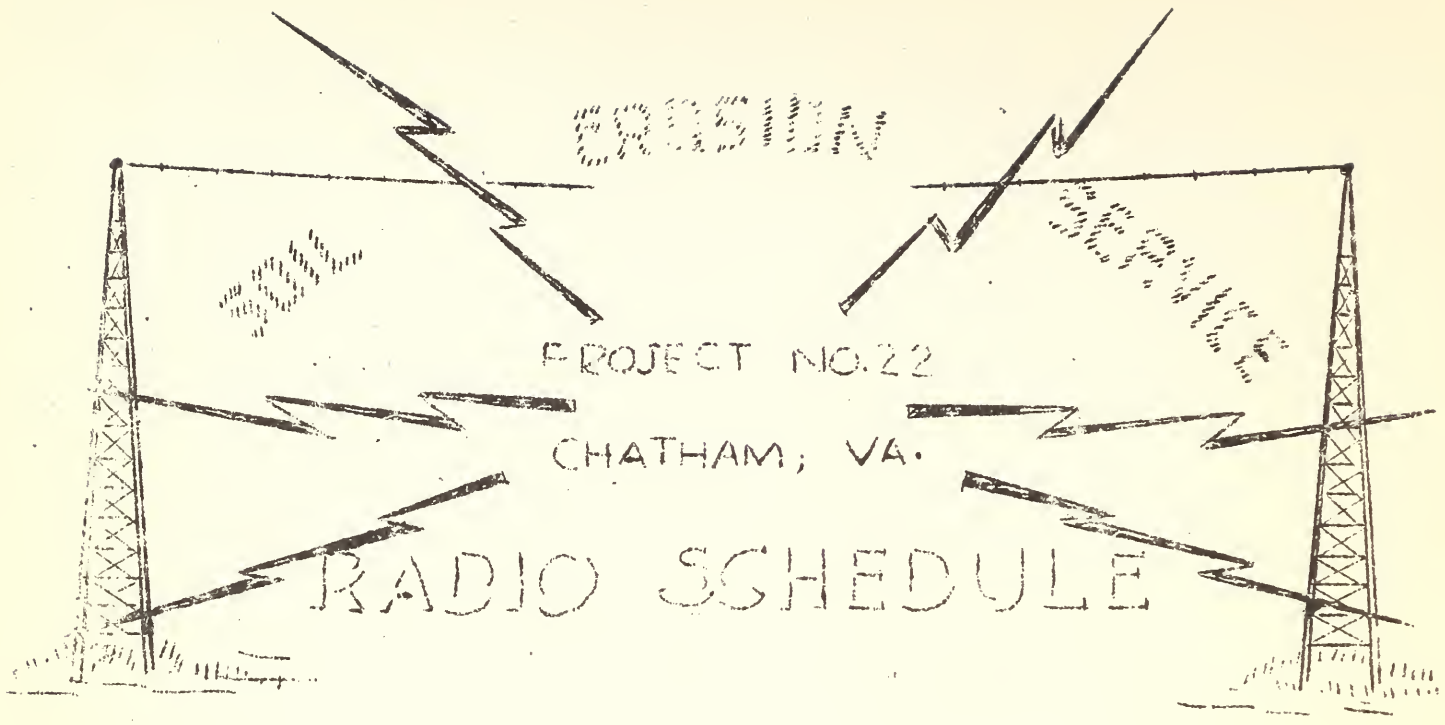
THE SOIL WE TILL MUST FEED, NOT ONLY THIS GENERATION, BUT ALL SUCCEEDING GENERATIONS.



STATION W. B. T. M., DANVILLE, VA. -FARM BULLETIN HOUR 1:30 P.M.

April 2, 1935 - "Menace of Soil Erosion", by E. F. Goldston, Soil Expert.

April 9, 1935 - "The Cooperator and Erosion Control", by A. M. Moore, Agricultural Aide.

April 16,1935 - "Engineering and Erosion Control as Practiced by a CCC Camp", by H. C. Mauer, Engineer.

April 23,1935 - "Grass and Erosion Control", by Carl N. Prince, Agronomist.

April 30,1935 - "Highway Beautification and Bank Protection", by H. J. Neale, Landscape Engineer, Department of Highways, Richmond, Virginia.

STATION W. R. V. A., RICHMOND, VA. - 2:45 to 3:00 P. M.

April 4, 1935 - "Soil Conservation and Permanent Agriculture", by Alec Yedinak, Soil Expert.

April 11,1935 - "Cooperative Agreements and Soil Erosion Control", by H. L. Dunton, Assistant Erosion Specialist.

April 18,1935 - "Forestry and the Control of Soil Erosion", by Joseph B. Pike, Jr., Chief Forester.

April 25,1935 - "Farm Management and Soil Erosion Control", by T. L. Copley, Chief Agronomist.

It was stated in a previous issue of this bulletin that there are approximately 25,000 gullies in the Banister River Area that have reached such enormous proportions due to negligence on the part of the owners, that they offer extremely difficult problems for proper control. A gully, regardless of shape or size, is considered controlled when it has stopped from eroding.

This conservative estimate, however, does not include the many thousands of small hillside gullies, ranging from 1 to 5 feet in depth and from one to several hundred yards in length, which may be found on almost every steep field in the area because gullies of this type can be very easily controlled and even reclaimed by the simple method of staking pine brush down securely in the bottoms with the butts down stream for the entire length of the gully. After the brush has been properly placed and fastened down with smooth wire or other means, the gully banks should be plowed down to prevent further side cutting and also to assist in the silting up of the gully. Small gullies 5 feet in depth or less treated in this manner have been known to be completely reclaimed and farmed over in the course of three years. It was necessary, however, in a number of cases to add brush two or three times before a condition was attained that was satisfactory from the farmers point of view.

The majority of the larger gullies in the Banister River Area, ranging from 5 to 30 feet in depth and from 50 to 500 yards in length are commonly found in the woods with their heads extending back into and along the edge of cultivated fields. Not many years ago the fields which are now in gullies and surrounded by woods except for the heads, were once under cultivation, but when the gullies took them over, because of improper farming methods and negligence on the part of the farmers they were abandoned and allowed to grow up in trees.

Unless the heads of such gullies are controlled they will continue to cut back up the slope into the cultivated fields and down on the opposite slope; eventually consuming the entire field.

The heads of gullies of this type can be completely and economically controlled in almost every case by intercepting and leading the water away from the rims and emptying it into woods or a thick growth of vines, such as honeysuckle, by means of a diversion ditch properly graded. The diversion ditch should be constructed on the contour similar to a terrace and having from 4 to 6 inches fall in a hundred feet. After the diversion ditch has been excavated the vertical walls of the gully should be sloped by means of a plow, labor or explosives to at least a 1½ to 1 slope and planted over with honeysuckle, kudzu vines, or Bermuda grass. If this procedure is followed, complete control is assured and at a very small cost to the farmer.

On the evening of March 22nd, the 378th Company CCC held a very delightful dance in the American Legion Ball Room at Danville, Va., in honor of the 90 enrollees who will be honorably discharged from the Civilian Conservation Corps on Sunday, March 31st. Music for the occasion was furnished by the well known Price - Fowler Orchestra of Danville. Refreshments were served during intermission; followed by a special dance number presented by one of the talented Camp boys.

STATISTICAL REPORT OF ACCOMPLISHMENTS-PROJECT NO. 22-CHATHAM, VA.
Period Ending March 30, 1935.

1.	Number of cooperative agreements signed	593
2.	Number of acres covered by cooperative agreements signed	73,238
3.	Number of acres planned for land use and erosion control	32,105
4.	Number of farms planned as above	593
5.	Number of acres agreed to be retired from cultivation under cooperative agreements signed	5,393
6.	Number of acres agreed to be strip-cropped under cooperative agreements signed	4,262
7.	Number of acres actually strip-cropped	1,022
8.	Number of acres agreed to be terraced	21,065
9.	Number of acres actually terraced	2,468
10.	Number of acres agreed to be contour-furrowed	1,985
11.	Number of acres actually contour-furrowed	375
12.	Number of gully control structures built	5,278
13.	Number of acres planted to trees	543.21
14.	Number of trees planted	560,284
15.	Number of acres planted to erosion resisting crops (other than trees) including grass	3,673.948
16.	Number check dams in terrace outlets	1,619
17.	Number farms surveyed	1,390
18.	Number acres surveyed	152,912
19.	Number farms mapped (soils)	864
20.	Number acres mapped (soils)	104,739
21.	Number invitations received	621
22.	Number acres included in invitations	80,860
23.	Number acres agreed to be contour-tilled	18,222

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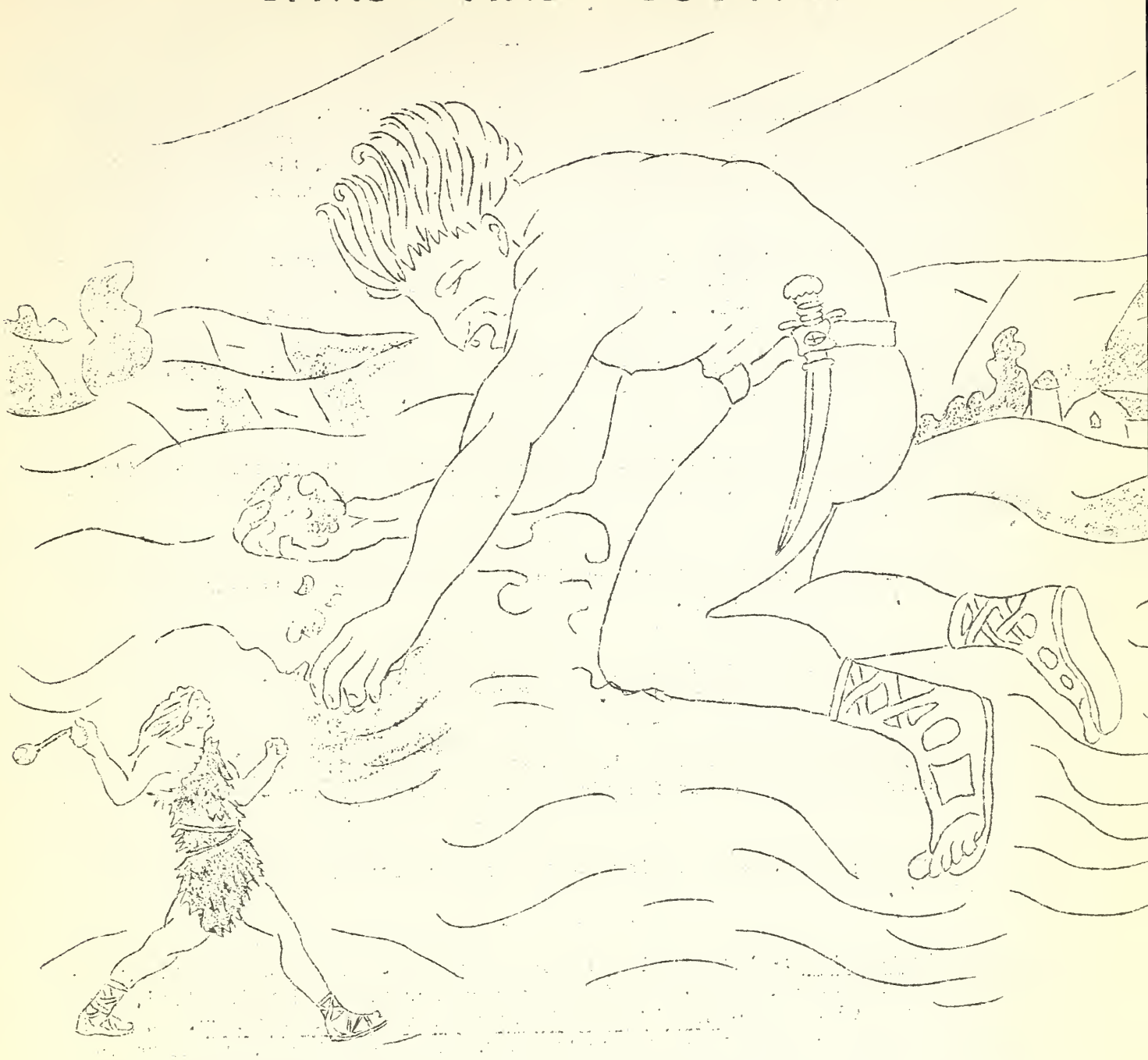
BASEBALL TEAM ORGANIZED - The employees of the Banister River Area, Soil Erosion Service, have organized a baseball team for the coming season. The managers are now working on a schedule and would be glad to hear from any teams desiring games. At a meeting on April 2nd, E. R. Minnich was elected Field Manager and E. H. Shelton, Business Manager. HELP SUPPORT YOUR TEAM! ! !

DAVID AND GOLIATH



The story of the defeat of gigantic Goliath by small, smart David has its counterpart today in the battle that is being waged against erosion. This modern "Goliath", in the form of wind and rain, is constantly tearing the fertile topsoil from our farms, and ruining the countryside with ditches and gullies.

The David of yore subdued his opponent by wisely placing a stone in a sling thus giving his weapon greater effectiveness. The "Davids" of today are fighting erosion by a similar method. Their "missiles" or "stones" are deep-rooted, close-growing, soil-holding crops such as legumes. But on much of this poor eroded land the growth of these crops is so slight as to be quite ineffective. So, today too, a "sling" is necessary. In this case the lime and the fertilizer, that render the land suitable for vigorous cover crop growth, constitute the "sling".

MORAL: Poor crop growth invites erosion. Use Lime and fertilizer to keep the land productive and you'll keep your land.

S O I L E R O S I O N S E R V I C E
United States Department of Agriculture
Project No. 22 - Chatham, Va.

NATIONAL SOIL EROSION FACTS

Soil Erosion Service Program in Virginia:- Engineering, and agronomic practices are coordinated with wildlife conservation, soil survey and erosion control education programs in the concerted effort to definitely establish control and land-use development upon the minds of the people of Virginia.

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Even as man has been responsible for the present status of erosion, so has man the power to reduce soil washing to a minimum.

--L. D. Baver, Tarkio River Area, Shenandoah, Iowa.

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A break in a terrace if not mended soon will result in a gully - small at first, but increasing in size with every rain.

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It is impossible to prevent entirely the movement of soil downhill, but we can slow it up to such an extent that it does not constitute a menace to agriculture.

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The direct annual cost of erosion to the farmers of this country is at least $400,000,000 annually.

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Proper utilization of every acre of land on the farm is the first Essential of Soil Erosion Control.

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"Many poor farmers have a lazy faith in the Lord: they think or hope that He will somehow make up for whatever they fail to do" - Hoard.

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More people now are talking about soil erosion and its control than ever before.

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A Four O'clock Call:- "It is time we are waking up. We cannot go along indefinitely in the old way of heaping error on error, of misusing land, wasting and destroying it -- not if this is to be a permanent country. Already there are numerous localities where not much is left to save, not much upon which to practice better methods of land use."

---H. H. Bennett, Director, Soil Erosion Service.

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What Is America's Answer?- "Individualistic handling of the land has exposed millions of Chinese to flood and drouth, to famine, pestilence and death.

"During the past one-hundred and fifty years in the United States, we have managed our lands in ways that indicated even more destructive possibilities.

"Over large areas the American record is worse than the Chinese for we have made no real effort to restore to the soil the fertility which has been removed.

"All of this has been careless, thoughtless, wanton, and to the disadvantage of nearly every one."

--Henry A. Wallace, Secretary of Agriculture.